



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/529,976

03/31/2005

Eduardus Allefs

NL02 0946 US

7561

24738

7590

11/16/2007

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
INTELLECTUAL PROPERTY & STANDARDS  
370 W. TRIMBLE ROAD MS 91/MG  
SAN JOSE, CA 95131

EXAMINER

JONES, DANIELLE E

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

11/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,976	<b>Applicant(s)</b> ALLEFS, EDUARDUS	
	<b>Examiner</b> Danelle E. Jones	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/31/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kibre et al. US 2002/0193994.

Regarding **claims 1, 16 and 20**, Kibre et al. discloses a speech synthesis apparatus comprising:

means for inputting of natural speech (see para [0022], [0023] speech is uttered by a human)

means for processing the natural speech to provide personalized speech segments (see para [0014]))

means for synthesizing of speech based on the personalized speech segments (see para [0014]).

Regarding **claims 2 and 17**, Kibre et al. discloses the speech synthesis apparatus of claim 1 comprising means for processing the natural speech

Art Unit: 2626

comprising means for extracting of speech segments from natural speech (see para [0023]).

Regarding **claims 3 and 18**, Kibre et al. discloses the speech apparatus of claim 1, further comprising:

a speech segments database for storing of speech segments, the speech segments having marker information assigned thereto (see para [0024], where the marker information is disclosed as identifying far snippets of the new speaker)

means for finding a best match of a speech segment in the speech segments database and natural speech (see para [0024] where a closeness comparison takes place)

means for copying the marker information after the best match has been performed to the natural speech (see para [0024]).

Regarding **claim 5**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising a personalized speech segments database for storing of extracted speech segments, the extracted speech segments having marker information assigned thereto (see para [0024], where the marker information is disclosed as identifying far snippets of the new speaker).

Art Unit: 2626

Regarding **claim 6**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising means for storing a list of words to be spoken by a speaker to provide the personalized speech segments (see para [0007], [0021])

Regarding **claim 7**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising a user interface for display of words to be spoken by a user (see para [0035]).

Regarding **claim 8**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising means for rendering of words to be spoken prior to inputting of the natural speech (see para [0035])

Regarding **claim 10**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising means for exporting of the personalized speech segments (see para [0028])

Regarding **claim 11**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising the natural speech to be inputted comprising a list of nonsense words (see para [0010], where a greedy selection algorithm is utilized to select the text, which is done based on an optimal solution resulting in random text selection, thus resulting in "nonsense" words)

Regarding **claim 12**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising the speech segments being diphones, triphones and/or polyphones (see para [0008])

Regarding **claim 14**, Kibre et al. discloses the speech synthesis apparatus of claim 1, further comprising control means for providing text to the means for synthesizing of speech (see para [0028]-[0029])

Regarding **claim 15**, Kibre et al. discloses a consumer device such as an audio, video, household, camera, computer, telecommunication, car navigation and/or personal digital assistant device, comprising a speech synthesis apparatus in accordance with claim 1 for providing of a personalized natural speech output (see para [0007] – [0008]).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kibre et al. US 2002/0193994 in view of Holmes, "Speech Synthesis and Recognition.

Art Unit: 2626

Regarding **claims 4 and 19**, Kibre et al. discloses the speech synthesis apparatus of claim 3. Kibre et al. does not disclose the means for finding a best match being adapted to perform a dynamic time warping type method. However this feature is well known in the art as indicated by Holmes. Holmes discloses a method for finding a best match using dynamic time warping (see page 115, section 8.5. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Dynamic Time Warping for the benefit of finding a best match, which applies the optimum non-linear timescale (see page 115, section 8.5).

Regarding **claim 13**, Kibre et al. discloses the speech synthesis apparatus of claim 1. Kibre et al. does not disclose further comprising the means for synthesizing of speech being adapted to perform the speech synthesis by means of a PSOLA type method. However this feature is well known in the art as indicated by Holmes. Holmes discloses a method of synthesis by concatenating waveform segments, which is the PSOLA method (page 74, section 5.5). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the PSOLA method for speech synthesis for the benefit of obtaining a smooth signal, thus improving the quality of the signal (see page 74, section 5.5).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kibre et al. US 2002/0193994.

Regarding **claim 9**, Kibre et al. discloses the speech synthesis apparatus of claim 1, Kibre et al. does not disclose a set of personalized speech segments databases for different speakers and means for selecting one of the personalized speech segments databases from the set of personalized speech segments databases. However these features are well known in the art. Kibre et al. discloses a method for personalizing a speech synthesizer. However without multiple speech segment databases the synthesizer would only be personalized for one person. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a set of speech segment databases and a means for choosing one for the benefit of personalizing the speech synthesis system for multiple people.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danelle E. Jones whose telephone number is 571-270-1241. The examiner can normally be reached on M-F 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJ  
10/26/07



**RICHEMOND DORVIL**  
**SUPERVISORY PATENT EXAMINER**